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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		Boyce 6-2	
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	09/668,242	Sept. 22, 2000	
	First Named Inventor		
	Boyce et al.		
	Art Unit	Examiner	
	2667	Anh Vu H. Ly	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
<input type="checkbox"/>	applicant/inventor.		
<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		
<input checked="" type="checkbox"/>	attorney or agent of record. Registration number <u>36,597</u>		
<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		
		Signature <u>Kevin M. Mason</u> Typed or printed name <u>Kevin M. Mason</u> (203) 255-6560 Telephone number _____ Date _____	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Boyce 6-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

5  
Applicant(s): Boyce et al.  
Case: 6-2  
Serial No.: 09/668,242  
Filing Date: September 22, 2000  
10 Group: 2667  
Examiner: Anh Vu H. Ly

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Signature: Bobby Blake Date: September 30, 2005

Title: Complete User Datagram Protocol (CUDP) for Wireless Multimedia Packet Networks Using Improved Packet Level Forward Error Correction (FEC) Coding

PRE-APPEAL BRIEF REQUEST FOR REVIEW

20 Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

25 Sir:

The present invention and prior art have been summarized in Applicants' prior responses.

30 Statement of Grounds of Rejection

Claims 1-44 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 1-2, 4, 15-17, 19, 23-25, 27, 38-39, and 41 are rejected under 35 U.S.C. §102(a) as being anticipated by Larzon et al. and claims 8-12, 20, 31-35, and 42 are rejected under 35 U.S.C. §103(a) as being unpatentable over Larzon et al. in view of Dillon et al.

Section 112 Rejections

Claims 1-44 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply

with the written description requirement. In particular, the Examiner asserts that the specification does not describe nor support the steps of receiving and forwarding payload error information at the time the application was filed.

5 The present invention is directed to forwarding error information related to the payload, where each packet, as well as the channel frame error information, is forwarded to a given application. Appellants note, for example, that the present disclosure teaches that, “if a physical frame is corrupted, the *payload* within the frame is represented *as a set of erasures, which can be recognized by the FEC decoder.*” (Page 4, lines 20-21; emphasis added.) This protocol, therefore, further assists the FEC decoding process by forwarding the locations of corrupted frames to the FEC  
10 decoder. Since the purpose of forwarding the error information to the application is to perform forward error correction on the data, a person of ordinary skill in the art would recognize that the forwarded error information is payload error information.

In addition, channel errors are known to corrupt data frames (payload). For example, United States Patent Application Number 09/668,243 entitled “Radio Link Protocol (RLP)/Point-to-  
15 Point Protocol (PPP) Design for Wireless Multimedia Packet Networks that Passes Corrupted Data and Error Location Information Among OSI Layers,” incorporated by reference in the present disclosure, teaches that:

20 at the Radio Link Protocol (RLP) layer, the PPP/IP packets are further segmented into multiple *data frames* with separate RLP headers, to accomplish physical layer transmissions. At the receiving host, the RLP layer receives *data frames* from the physical layer, where data frames can be corrupted by *channel errors*, and evaluates the validity of the data frames.  
(Page 2, lines 7-12; emphasis added.)

Thus, data frames are created from, for example, PPP/IP packets and can be corrupted by channel  
25 errors. Moreover, Appellants note that the disclosure teaches that “the present invention *forwards each packet, as well as the channel frame error information, to a given application.*” (Page 3, lines 33-34; emphasis added.) The present disclosure also teaches that, “at the receiver, the CUDP protocol *forwards the frame error information, as well as the packet data, to the application layer.*”  
(Page 4, lines 9-10; emphasis added.) Therefore, the *channel frame error information* disclosed in  
30 the present disclosure refers to information regarding the channel errors that occur in data frames. A person of ordinary skill in the art would recognize that such data frames are payload to the RLP layer

and that, therefore, *payload error information* is equivalent to *channel frame error information*. Thus, the present disclosure describes the step of receiving and forwarding payload error information (page 3, lines 33-34).

5                   Independent Claims 1, 16, 24 and 38

Independent claims 1, 16, 24, and 38 are rejected under 35 U.S.C. §102(a) as being anticipated by Larzon et al. Regarding claims 1, 16, 24, and 38, the Examiner has previously asserted that Larzon discloses a transport protocol capable of delivering partially damaged payload to codecs that permit this, while protecting vital header fields with a checksum (forwarding error  
10 information with multimedia data to a higher layer). In the present Office Action, the Examiner asserts that the disclosure does not explicitly specify that the channel errors are payload errors. The Examiner further asserts that, as is known in the art, a data frame includes the header portion and data portion, therefore, frame error information does not specifically indicate the payload portion. The Examiner asserts that Larzon discloses (page 191, col. 2) that errors in the insensitive parts of a  
15 packet are forwarded to the receiving application with a modified checksum (payload error information) so that they would not be detected as damaged packets by the UDP layer.

As noted above, the present invention is directed to forwarding error information related to the payload, where each packet, as well as the channel frame error information, is forwarded to a given application. Appellants note that the present disclosure teaches, for example,  
20 that, “if a physical frame is corrupted, the *payload* within the frame is represented as a set of erasures, which can be recognized by the FEC decoder.” (Page 4, lines 20-21; emphasis added.) The protocol of the present invention, therefore, further assists the FEC decoding process by forwarding the locations of corrupted frames to the FEC decoder. Since the purpose of forwarding the error information to the application is to perform forward error correction on the data, a person of  
25 ordinary skill in the art would recognize that the forwarded error information is payload error information. Independent claims 1, 16, 24, and 38, as amended, require forwarding *payload* error information with said multimedia data to a higher layer. Larzon, however, discloses that the policy achieved by UDP Lite is to “provide *data payloads unchecksummed* to the application while checksumming headers.” (Section II.D, first paragraph.)

Regarding the Examiner's assertion that Larzon discloses (page 191, col. 2) that errors in the insensitive parts of a packet are forwarded to the receiving application with a modified checksum (payload error information) so that they would not be detected as damaged packets by the UDP layer, Appellants note that a person of ordinary skill in the art would recognize that error information enables damaged packets to be detected. *A checksum modified such that damaged packets cannot be detected is not (payload) error information.* Thus, Larzon does not disclose or suggest forwarding payload error information to the receiving application.

Thus, Larzon et al. do not disclose or suggest forwarding payload error information with said multimedia data to a higher layer, as required by independent claims 1, 16, 24, and 38.

#### Additional Cited References

Dillon et al. was also cited by the Examiner for its disclosure that MDS codes are used in applications data. Applicants note that Dillon is directed to a satellite data receiver which permits the user of a conventional satellite television system to receive data services, other than televised signals, without upgrading their outdoor unit or requiring an installer to be let in to the consumer's home. Dillon does not address the issue of forwarding payload error information with multimedia data to a higher network layer.

Thus, Dillon et al. do not disclose or suggest forwarding payload error information with said multimedia data to a higher layer, as required by independent claims 1, 16, 24, and 38.

#### Conclusion

Thus, Larzon et al. and Dillon et al., alone or in combination, do not disclose or suggest forwarding payload error information with said multimedia data to a higher layer, as required by each of the independent claims. The remaining rejected dependent claims are believed allowable for at least the reasons identified above with respect to the independent claims.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

5                   The attention of the Examiner and the Pre-Appeal Review Committee to this matter is appreciated.

Respectfully submitted,

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Date: September 30, 2005



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